WHAT IS CLAIMED IS

1. A method of inhibiting human stearoyl-CoA desaturase (hSCD) activity comprising contacting a source of hSCD with a compound of formula (I):

wherein:

x and y are each independently 1, 2 or 3;

W is -O-, -N(R¹)-, -C(O)-, -S(O)_t-; (where t is 0, 1 or 2), -N(R¹)S(O)₂-, -S(O)₂N(R¹)-, -OS(O)₂N(R¹)-, -C(O)N(R¹)-, -OC(O)N(R¹)-, -C(S)N(R¹)-, -OC(S)N(R¹)-, -N(R¹)C(O)- or -N(R¹)C(O)N(R¹)-;

 $V is -C(O)-, -C(S)-, -C(O)N(R^1)-, -C(O)O-, -S(O)_2-, -S(O)_2N(R^1)- or -C(R^{11})H-; \\$

each R^1 is independently selected from the group consisting of hydrogen, C_1 - C_{12} alkyl, C_2 - C_{12} hydroxyalkyl, C_4 - C_{12} cycloalkylalkyl and C_7 - C_{19} aralkyl;

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} cycloalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_4 - C_{12} heteroaryl, and C_3 - C_{12} heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

 R^3 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_3 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R¹³)₂;

 R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} and R^{10a} are each independently selected

from hydrogen or C₁-C₃alkyl;

or R^7 and R^{7a} together, or R^8 and R^{8a} together, or R^9 and R^{9a} together, or R^{10} and R^{10a} together are an oxo group, provided that when V is -C(O)-, R^7 and R^{7a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^{10} , R^{10a} , R^7 , and R^{7a} together with one of R^8 , R^{8a} , R^9 and R^{9a} form an alkylene bridge, while the remaining R^{10} , R^{10a} , R^7 , R^{7a} , R^8 , R^8 , R^9 , and R^{9a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

R¹¹ is hydrogen or C₁-C₃alkyl; and each R¹³ is independently selected from hydrogen or C₁-C₆alkyl; a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

2. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to the mammal in need thereof a therapeutically effective amount of a compound of formula (I):

$$R^{2} - W - V - R^{3}$$

$$R^{6} R^{9a} R^{9a} R^{8a}$$

$$R^{10a} R^{7a} R^{7a}$$

$$N - V - R^{3}$$

$$R^{8a} R^{8a}$$

$$R^{8a} R^{8a}$$

wherein:

x and y are each independently 1, 2 or 3:

W is -O-, -N(R¹)-, -C(O)-, -S(O)_t-; (where t is 0, 1 or 2), -N(R¹)S(O)₂-, -S(O)₂N(R¹)-, -C(O)N(R¹)-, -OC(O)N(R¹)-, -C(S)N(R¹)-, -OC(S)N(R¹)-, -N(R¹)C(O)- or -N(R¹)C(O)N(R¹)-;

 $V \ is \ -C(O)-, \ -C(S)-, \ -C(O)N(R^1)-, \ -C(O)O-, \ -S(O)_2-, \ -S(O)_2N(R^1)- \ or \ -C(R^{11})H-;$

each R^1 is independently selected from the group consisting of hydrogen, C_1 - C_{12} alkyl, C_2 - C_{12} hydroxyalkyl, C_4 - C_{12} cycloalkylalkyl and C_7 - C_{19} aralkyl; R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkyl, C_3 - C_{12} cycloalkyl,

 C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl, and C_3 - C_{12} heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

 \mbox{R}^3 is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R¹³)₂;

 R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or R^7 and R^{7a} together, or R^8 and R^{8a} together, or R^9 and R^{9a} together, or R^{10} and R^{10a} together are an oxo group, provided that when V is -C(O)-, R^7 and R^{7a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^{10} , R^{10a} , R^7 , and R^{7a} together with one of R^8 , R^{8a} , R^9 and R^{9a} form an alkylene bridge, while the remaining R^{10} , R^{10a} , R^7 , R^{7a} , R^8 , R^8 , R^8 , and R^{9a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

R¹¹ is hydrogen or C₁-C₃alkyl; and each R¹³ is independently selected from hydrogen or C₁-C₆alkyl; a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

- 3. The method of Claim 2 wherein the mammal is a human.
- 4. The method of Claim 3 wherein the disease or condition is selected from the group consisting of Type II diabetes, impaired glucose tolerance, insulin resistance, obesity, fatty liver, non-alcoholic steatohepatitis, dyslipidemia and metabolic syndrome and any combination of these.

5. The method of Claim 4 wherein the disease or condition is Type II diabetes.

- 6. The method of Claim 4 wherein the disease or condition is obesity.
- 7. The method of Claim 4 wherein the disease or condition is metabolic syndrome.
 - 8. The method of Claim 4 wherein the disease or condition is fatty liver.
- 9. The method of Claim 4 wherein the disease or condition is non-alcoholic steatohepatitis.
 - 10. A compound of formula (IIa):

$$R^{2} = \begin{pmatrix} R^{4} & R^{5} & R^{10a} & R^{10} & R^{7} & R^{7a} & R^$$

wherein:

x and y are each independently 1, 2 or 3;

R¹ is selected from the group consisting of hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

 R^2 is selected from the group consisting of C_7 - C_{12} alkyl, C_3 - C_{12} alkenyl, C_7 - C_{12} hydroxyalkyl, C_1 - C_{12} alkoxy, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} hydroxyalkenyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, C_{13} - C_{19} aralkyl, C_1 - C_{12} heteroaryl, C_3 - C_{12} heterocyclylalkyl and C_3 - C_{12} heteroarylalkyl, provided that R^2 is not pyrazinyl, pyridinonyl, pyrrolidinone or imidazolyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl, where some or all of the rings may be fused to each other;

 R^3 is selected from the group consisting of C_3 - C_{12} alkyl, C_3 - C_{12} alkenyl, C_3 - C_{12} hydroxyalkyl, C_3 - C_{12} hydroxyalkenyl, C_3 - C_{12} alkoxy, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl,

C₃-C₁₂heterocyclylalkyl, C₁-C₁₂ heteroaryl and C₃-C₁₂heteroarylalkyl;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R¹³)₂;

 R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or R^9 and R^{9a} together, or R^{10} and R^{10a} together form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^7 , R^{7a} , R^{10} and R^{10a} , together with one of R^8 , R^{8a} , R^9 and R^{9a} , form an alkylene bridge, while the remaining R^{10} , R^{10a} , R^7 , R^{7a} , R^8 , R^8 , R^9 , and R^{9a} are each independently selected from hydrogen or C_1 - C_3 alkyl; and

each R¹³ is independently selected from hydrogen or C₁-C₆alkyl; a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

11. The compound of Claim 10 wherein:

x and y are each 1;

R¹ is hydrogen or C₁-C₆alkvi:

 R^2 is selected from the group consisting of C_7 - C_{12} alkyl, C_3 - C_{12} alkenyl, C_7 - C_{12} hydroxyalkyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} hydroxyalkenyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, C_{13} - C_{19} aralkyl, C_3 - C_{12} heterocyclylalkyl, and C_3 - C_{12} heteroarylalkyl;

 R^3 is selected from the group consisting of C_3 - C_{12} alkyl, C_3 - C_{12} alkenyl, C_3 - C_{12} hydroxyalkyl, C_3 - C_{12} hydroxyalkenyl, C_3 - C_{12} alkoxy, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_1 2 heteroaryl and C_3 - C_1 2heteroarylalkyl;

R⁴, R⁵ and R⁶ are each hydrogen; and R⁷, R^{7a}, R⁸, R^{8a}, R⁹, R^{9a}, R¹⁰, and R^{10a} are each hydrogen.

- 12. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 10.
- 13. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 10.

14. A compound of formula (IIb):

$$R^{1} = \begin{pmatrix} R^{4} & R^{5} & R^{10a} & R^{10} & R^{7} & R^{7a} & R^$$

wherein:

x and y are each independently 1, 2 or 3;

R¹ is selected from the group consisting of hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkenyl, C_1 - C_6 alkoxy, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

or R² is phenyl optionally substituted with one or more substituents selected from halo and C₁-C₀trihaloalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl, where some or all of the rings may be fused to each other;

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl, C_1 - C_6 trihaloalkoxy, C_1 - C_6 alkylsulfonyl, -N(R^{12})₂, -OC(O) R^{12} , -C(O)O R^{12} , -S(O)₂N(R^{12})₂, cycloalkyl, heterocyclyl, heteroaryl and heteroarylcycloalkyl, provided that R^3 is not phenyl substituted with optionally substituted thienyl;

 R^4 , R^5 and R^6 are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^{13})_2$;

 \mathbb{C}_3 R⁷, R^{7a}, R⁸, R^{8a}, R⁹, R^{9a}, R¹⁰, and R^{10a} are each independently selected from hydrogen or C₁-C₃alkyl;

or R^9 and R^{9a} together, or R^{10} and R^{10a} together form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{9a} , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^7 , R^{7a} , R^{10} and R^{10a} , together with one of R^8 , R^{8a} , R^9 and R^{9a} , form an alkylene bridge, while the remaining R^{10} , R^{10a} , R^7 , R^{7a} , R^8 , R^8 , R^9 , and R^{9a} are each independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^{12} is independently selected from hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, aryl or aralkyl; and

each R¹³ is independently selected from hydrogen or C₁-C₆alkyl; a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

15. The compound of Claim 14 wherein:

x and y are each 1;

R¹ is hydrogen or C₁-C₆alkyl;

 $R^2 \ is \ selected \ from \ the \ group \ consisting \ of \ C_1-C_{12}alkyl, \ C_2-C_{12}alkenyl, \ C_2-C_{12}hydroxyalkyl, \ C_2-C_{12}hydroxyalkenyl, \ C_1-C_8alkoxy, \ C_3-C_{12}alkoxyalkyl, \ C_3-C_{12}cycloalkyl, \ C_4-C_{12}cycloalkylalkyl, \ C_7-C_{19}aralkyl, \ C_3-C_{12} \ heterocyclyl, \ C_3-C_{12}heterocyclylalkyl, \ C_1-C_{12}heteroaryl \ and \ C_3-C_{12}heteroarylalkyl;$

or R^2 is phenyl optionally substituted with one or more substituents selected from halo and C_1 - C_6 trihaloalkyl;

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl, C_1 - C_6 trihaloalkoxy, C_1 - C_6 alkylsulfonyl, -N(R^{12})₂, -OC(O) R^{12} , -C(O)OR¹² and -S(O)₂N(R^{12})₂;

R⁴, R⁵ and R⁶ are each hydrogen;
R⁷, R^{7a}, R⁸, R^{8a}, R⁹, R^{9a}, R¹⁰, and R^{10a} are each hydrogen; and each R¹² is independently selected from hydrogen, C₁-C₆alkyl, C₃-C₆cycloalkyl, aryl or aralkyl.

16. The compound of Claim 15 wherein:

 R^2 is C_7 - C_{12} aralkyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_3 alkyl and C_1 - C_6 trihaloalkyl; and R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

- 17. The compound of Claim 16 selected from the group consisting of the following:
- 3-(4-Fluoro-phenyl)-N-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-propionamide;
- 4-Phenyl-N-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-butyramide;
- 4-(4-Fluoro-phenyl)-N-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-

butyramide; and

3-Phenyl-N-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-propionamide.

18. The compound of Claim 15 wherein:

R² is C₁-C₁₂alkyl or C₂-C₁₂alkenyl; and

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

19. The compound of Claim 18 selected from the group consisting of the following:

Hexanoic acid {5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-amide; Heptanoic acid {5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-amide; and 5-Methylpentanoic acid {5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-amide.

20. The compound of Claim 15 wherein:

 R^2 is C_3 - C_{12} heteroarylalkyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_3 alkyl and C_1 - C_6 trihaloalkyl; and

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

- 21. The compound of Claim 20, namely, 3-Pyridin-3-yl-N-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-propionamide.
 - 22. The compound of Claim 15 wherein:

R² is phenyl optionally substituted with one or more substituents selected from halo and C₁-C₆trihaloalkyl; and

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

- 23. The compound of Claim 22, namely, 4-Fluoro-*N*-{5-[4-(2-trifluoromethylbenzoyl)piperazin-1-yl]pyridin-2-yl}benzamide.
- 24. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a

mammal in need thereof a therapeutically effective amount of a compound of Claim 14.

25. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 14.

26. A compound of formula (III):

$$R^{2} = \begin{bmatrix} 0 & R^{1} & R^{4} & R^{5} & R^{10a} & R^{10} & R^{7} & R^{7a} &$$

wherein:

x and y are each independently 1, 2 or 3;

 V_a is -C(O)-, -C(S)-, -C(O)N(R¹)-, -C(O)O-, -S(O)₂- or -S(O)₂N(R¹)-; each R¹ is independently selected from the group consisting of

hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_1 - C_6 alkoxy, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl, where some or all of the rings may be fused to each other;

 $$\rm R^3$$ is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R¹³)₂;

R⁷, R^{7a}, R⁸, R^{8a}, R⁹, R^{9a}, R¹⁰, and R^{10a} are each independently selected

from hydrogen or C₁-C₃alkyl;

or R^7 and R^{7a} together, or R^8 and R^{8a} together, or R^9 and R^{9a} together, or R^{10} and R^{10a} together are an oxo group, provided that when V_a is -C(O)-, R^7 and R^{7a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R¹⁰, R^{10a}, R⁷, and R^{7a} together with one of R⁸, R^{8a}, R⁹ and R^{9a} form an alkylene bridge, while the remaining R¹⁰, R^{10a}, R⁷, R^{7a}, R⁸, R^{8a}, R⁹, and R^{9a} are each independently selected from hydrogen or C₁-C₃alkyl; and

each R¹³ is independently selected from hydrogen or C₁-C₆alkyl; a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

27. The compound of Claim 26 wherein:

x and y are each 1;

 V_a is -C(O)-;

R¹ is hydrogen or C₁-C₆alkyl;

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_1 - C_6 alkoxy, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

 R^3 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} beterocyclyl, C_3 - C_{12} beterocyclylalkyl, C_3 - C_{12} beteroaryl and C_3 - C_{12} beteroarylalkyl;

R⁴, R⁵ and R⁶ are each hydrogen; and R⁷, R^{7a}, R⁸, R^{8a}, R⁹, R^{9a}, R¹⁰, and R^{10a} are each hydrogen.

28. The compound of Claim 27 wherein:

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl, C_1 - C_6 trihaloalkoxy, C_1 - C_6 alkylsulfonyl, -N(R^{12})₂, -OC(O) R^{12} , -C(O)OR¹², -S(O)₂N(R^{12})₂, cycloalkyl, heterocyclyl, heteroaryl and heteroarylcycloalkyl; and

each R^{12} is independently selected from hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, aryl or aralkyl.

29. The compound of Claim 28 wherein:

R2 is C1-C12alkyl or C2-C12alkenyl; and

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, $C_1\text{-}C_6$ alkyl, $C_1\text{-}C_6$ trihaloalkyl and $C_1\text{-}C_6$ trihaloalkoxy.

- 30. The compound of Claim 29 selected from the group consisting of the following:
- Pentane-1-sulfonic acid {5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-amide; and
- Hexane-1-sulfonic acid {5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-amide.
 - 31. The compound of Claim 28 wherein:

 $R^2 \ \text{is } \ C_7\text{-}C_{12} \text{aralkyl optionally substituted by one or more substituents}$ selected from the group consisting of halo, $C_1\text{-}C_3 \text{alkyl}$ and $C_1\text{-}C_6 \text{trihaloalkyl}$; and $R^3 \ \text{is phenyl optionally substituted by one or more substituents selected}$ from the group consisting of halo, $C_1\text{-}C_6 \text{alkyl}$, $C_1\text{-}C_6 \text{trihaloalkyl}$ and $C_1\text{-}C_6 \text{trihaloalkoxy}$.

- 32. The compound of Claim 31, namely, 3-Phenyl-propane-1-sulfonic acid {5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-amide.
- 33. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 26.
- 34. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 26.
 - 35. A compound of formula (IV):

$$R^{1}$$
 R^{1}
 R^{2}
 R^{2}
 R^{4}
 R^{5}
 R^{10a}
 R^{10}
 R^{7}
 R^{7a}
 R^{7a}
 R^{7a}
 R^{10a}
 $R^$

wherein:

x and y are each independently 1, 2 or 3;

 V_a is -C(O)-, -C(S)-, -C(O)N(R¹)-, -C(O)O-, -S(O)₂- or -S(O)₂N(R¹)-; each R¹ is independently selected from the group consisting of

hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_1 -heteroaryl and C_3 - C_1 -heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl, where some or all of the rings may be fused to each other;

 R^3 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} beterocyclyl, C_3 - C_{12} beterocyclylalkyl, C_3 - C_{12} beteroaryl and C_3 - C_{12} beteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R¹³)₂;

 $R^7,\,R^{7a},\,R^8,\,R^{8a},\,R^9,\,R^{9a},\,R^{10},$ and R^{10a} are each independently selected from hydrogen or $C_1\text{-}C_3$ alkyl;

or R^7 and R^{7a} together, or R^8 and R^{8a} together, or R^9 and R^{9a} together, or R^{10} and R^{10a} together are an oxo group, provided that when V_a is -C(O)-, R^7 and R^{7a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^{10} , R^{10a} , R^7 , and R^{7a} together with one of R^8 , R^{8a} , R^9 and R^{9a}

form an alkylene bridge, while the remaining R^{10} , R^{10a} , R^7 , R^{7a} , R^8 , R^8 , R^8 , and R^{9a} are each independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^{13} is independently selected from hydrogen or C_1 - C_6 alkyl; a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

36. The compound of Claim 35 wherein:

x and y are each 1;

 V_a is -C(O)-;

each R1 is independently hydrogen or C1-C6alkyl;

 $$\rm R^2$$ is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₃-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂ heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

 R^3 is selected from the group consisting of $C_1\text{-}C_{12}$ alkyl, $C_2\text{-}C_{12}$ alkenyl, $C_2\text{-}C_{12}$ hydroxyalkyl, $C_2\text{-}C_{12}$ hydroxyalkenyl, $C_2\text{-}C_{12}$ alkoxyalkyl, $C_3\text{-}C_{12}$ cycloalkyl, $C_3\text{-}C_{12}$ heterocyclyl, $C_3\text{-}C_{12}$ heterocyclyl alkyl, $C_3\text{-}C_{12}$ heterocyclyl and $C_3\text{-}C_{12}$ heteroaryl and $C_3\text{-}C_{12}$ heteroarylalkyl;

 R^4 , R^5 and R^6 are each hydrogen; and R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each hydrogen.

37. The compound of Claim 36 wherein:

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, $C_1\text{-}C_6$ alkyl, $C_1\text{-}C_6$ trihaloalkoxy, $C_1\text{-}C_6$ trihaloalkoxy, $C_1\text{-}C_6$ alkylsulfonyl, -N(R 12)₂, -OC(O)R 12 , -C(O)OR 12 , -S(O)₂N(R 12)₂, cycloalkyl, heterocyclyl, heteroaryl and heteroarylcycloalkyl; and

each R^{12} is independently selected from hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, aryl or aralkyl.

38. The compound of Claim 37 wherein:

R2 is C1-C12alkyl or C2-C12alkenyl; and

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, $C_1\text{--}C_6\text{alkyl}$, $C_1\text{--}C_6\text{trihaloalkyl}$ and $C_1\text{--}C_6\text{trihaloalkoxy}$.

39. The compound of Claim 38 selected from the group consisting of the following:

1-(3-Methyl-butyl)-3-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-urea; 1-Pentyl-3-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-urea; and 1-Butyl-3-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-urea.

40. The compound of Claim 37 wherein:

 R^2 is C_7 - C_{12} aralkyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_3 alkyl and C_1 - C_6 trihaloalkyl; and R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

- 41. The compound of Claim 40 selected from the group consisting of the following:
- 1-[3-(4-Fluoro-phenyl)-propyl]-3-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-urea;
- 1-Phenethyl-3-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-urea; and 1-Benzyl-3-{5-[4-(2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridin-2-yl}-urea.
- 42. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 35.
- 43. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 35.
 - 44. A compound of formula (V):

$$R^{2}$$
 W_{a} W_{a

wherein:

x and y are each independently 1, 2 or 3;

 W_a is -O-, -N(R¹)- or -S(O)_t- (where t is 0, 1 or 2);

 V_a is -C(O)-, -C(S)-, -C(O)N(R¹)-, -C(O)O-, -S(O)₂- or -S(O)₂N(R¹)-; x and y are each independently 1, 2 or 3;

each R¹ is independently selected from the group consisting of hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl, where some or all of the rings may be fused to each other;

 \mbox{R}^3 is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R¹³)₂;

 R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or R^7 and R^{7a} together, or R^8 and R^{8a} together, or R^9 and R^{9a} together, or R^{10} and R^{10a} together are an oxo group, provided that when V_a is -C(O)-, R^7 and R^{7a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{9a} , R^{9} , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^{10} , R^{10a} , R^7 , and R^{7a} together with one of R^8 , R^{8a} , R^9 and R^{9a} form an alkylene bridge, while the remaining R^{10} , R^{10a} , R^7 , R^{7a} , R^8 , R^8 , R^9 , and R^{9a} are each independently selected from hydrogen or C_1 - C_3 alkyl; and

each R¹³ is independently selected from hydrogen or C₁-C₆alkyl; a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

45. The compound of Claim 44 wherein: x and y are each 1;

W_a is -O-;

 V_a is -C(O)-;

R¹ is hydrogen or C₁-C₆alkyl;

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

 R^3 is selected from the group consisting of $C_1\text{-}C_{12}$ alkyl, $C_2\text{-}C_{12}$ alkenyl, $C_2\text{-}C_{12}$ hydroxyalkyl, $C_2\text{-}C_{12}$ hydroxyalkenyl, $C_2\text{-}C_{12}$ alkoxyalkyl, $C_3\text{-}C_{12}$ cycloalkyl, $C_4\text{-}C_{12}$ cycloalkylalkyl, aryl, $C_7\text{-}C_{19}$ aralkyl, $C_3\text{-}C_{12}$ heterocyclyl, $C_3\text{-}C_{12}$ heterocyclylalkyl, $C_1\text{-}C_{12}$ heteroaryl and $C_3\text{-}C_{12}$ heteroarylalkyl;

R⁴, R⁵ and R⁶ are each hydrogen; and R⁷, R^{7a}, R⁸, R^{8a}, R⁹, R^{9a}, R¹⁰, and R^{10a} are each hydrogen.

46. The compound of Claim 45 wherein:

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkoxy, C_1 - C_6 trihaloalkoxy, C_1 - C_6 alkylsulfonyl, -N(R^{12})₂, -OC(O) R^{12} , -C(O)O R^{12} , -S(O)₂N(R^{12})₂, cycloalkyl, heterocyclyl, heteroaryl and heteroarylcycloalkyl; and

each R^{12} is independently selected from hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, aryl or aralkyl.

47. The compound of Claim 44 wherein:

x and y are each 1;

 W_a is $-N(R^1)$ -;

 V_a is -C(O)-;

R¹ is hydrogen or C₁-C₆alkyl:

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

 R^3 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_1 2heteroaryl and C_3 - C_1 2heteroarylalkyl;

R⁴, R⁵ and R⁶ are each hydrogen; and

 R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each hydrogen.

48. The compound of Claim 47 wherein:

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, $C_1\text{-}C_6$ alkyl, $C_1\text{-}C_6$ trihaloalkyl, $C_1\text{-}C_6$ trihaloalkoxy, $C_1\text{-}C_6$ alkylsulfonyl, $-N(R^{12})_2$, $-OC(O)R^{12}$, $-C(O)OR^{12}$, $-S(O)_2N(R^{12})_2$, cycloalkyl, heterocyclyl, heteroaryl and heteroarylcycloalkyl; and

each R^{12} is independently selected from hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, aryl or aralkyl.

49. The compound of Claim 44 wherein:

x and y are each 1;

 W_a is $-S(O)_{t-}$ (where t is 0, 1 or 2);

 V_a is -C(O)-;

 R^2 is selected from the group consisting of $C_1\text{-}C_{12}$ alkyl, $C_2\text{-}C_{12}$ alkenyl, $C_2\text{-}C_{12}$ hydroxyalkyl, $C_2\text{-}C_{12}$ hydroxyalkenyl, $C_3\text{-}C_{12}$ alkoxyalkyl, $C_3\text{-}C_{12}$ cycloalkyl, $C_4\text{-}C_{12}$ cycloalkylalkyl, aryl, $C_7\text{-}C_{19}$ aralkyl, $C_3\text{-}C_{12}$ heterocyclyl, $C_3\text{-}C_{12}$ heterocyclylalkyl, $C_1\text{-}C_{12}$ heteroaryl and $C_3\text{-}C_{12}$ heteroarylalkyl;

 R^3 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_1 -heteroaryl and C_3 - C_1 -heteroarylalkyl;

 R^4 , R^5 and R^6 are each hydrogen; and R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each hydrogen.

50. The compound of Claim 49 wherein:

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, $C_1\text{-}C_6$ alkyl, $C_1\text{-}C_6$ trihaloalkyl, $C_1\text{-}C_6$ trihaloalkoxy, $C_1\text{-}C_6$ alkylsulfonyl, $-N(R^{12})_2$, $-OC(O)R^{12}$, $-C(O)OR^{12}$, $-S(O)_2N(R^{12})_2$, cycloalkyl, heterocyclyl, heteroaryl and heteroarylcycloalkyl; and

each R^{12} is independently selected from hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, aryl or aralkyl.

51. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 44.

52. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 44.

53. A compound of formula (VIa):

$$R^{2} - N = R^{10a} R^{10a} R^{10} R^{7a}$$

$$R^{2} - N = R^{10a} R^{10a} R^{10a} R^{$$

wherein:

x and y are each independently 1, 2 or 3;

R¹ is selected from the group consisting of hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

 R^2 is selected from the group consisting of C_7 - C_{12} alkyl, C_3 - C_{12} alkenyl, C_7 - C_{12} hydroxyalkyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} hydroxyalkenyl, C_3 - C_{12} cycloalkyl, C_3 - C_{12} heterocyclylalkyl, and C_3 - C_{12} heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl, where some or all of the rings may be fused to each other;

 R^3 is selected from the group consisting of C_3 - C_{12} alkyl, C_3 - C_{12} alkenyl, C_3 - C_{12} hydroxyalkyl, C_3 - C_{12} hydroxyalkenyl, C_3 - C_{12} alkoxy, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclylalkyl, C_5 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R¹³)₂;

 R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or R^7 and R^{7a} together, or R^8 and R^{8a} together, or R^9 and R^{9a} together, or R^{10} and R^{10a} together are an oxo group, provided that when V_a is -C(O)-, R^7 and R^{7a}

together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^{10} , R^{10a} , R^7 , and R^{7a} together with one of R^8 , R^{8a} , R^9 and R^{9a} form an alkylene bridge, while the remaining R^{10} , R^{10a} , R^7 , R^{7a} , R^8 , R^8 , R^8 , and R^{9a} are each independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^{13} is independently selected from hydrogen or C_1 - C_6 alkyl; including a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

54. The compound of Claim 53 wherein:

x and y are each 1;

R¹ is hydrogen or C₁-C₆alkyl;

 R^2 is selected from the group consisting of C_7 - C_{12} alkyl, C_3 - C_{12} alkenyl, C_7 - C_{12} hydroxyalkyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} hydroxyalkenyl, C_3 - C_{12} cycloalkyl,

 $C_4-C_{12} cycloalkylalkyl,\ C_{13}-C_{19} aralkyl,\ C_3-C_{12} heterocyclylalkyl,\ and\ C_3-C_{12} heteroarylalkyl;$

R³ is selected from the group consisting of C₃-C₁₂alkyl, C₃-C₁₂alkenyl,

 $C_3\text{-}C_{12}\text{hydroxyalkyl},\ C_3\text{-}C_{12}\text{hydroxyalkenyl},\ C_3\text{-}C_{12}\text{alkoxy},\ C_3\text{-}C_{12}\text{alkoxyalkyl},$

 C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl,

C₃-C₁₂heterocyclylalkyl, C₅-C₁₂ heteroaryl and C₃-C₁₂heteroarylalkyl;

R⁴, R⁵ and R⁶ are each hydrogen; and

 R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each hydrogen.

- 55. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 53.
- 56. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 53.

57. A compound of formula (VIb):

$$R^{2} - N = R^{10a} R^{10a} R^{7a} R^{7a}$$

$$R^{2} - N = R^{6} R^{9a} R^{9} R^{8} R^{8a}$$

$$(VIb)$$

wherein:

x and y are each independently 1, 2 or 3;

each R^1 is independently selected from the group consisting of hydrogen, C_1 - C_{12} alkyl, C_2 - C_{12} hydroxyalkyl, C_4 - C_{12} cycloalkylalkyl and C_7 - C_{19} aralkyl;

 R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl, where some or all of the rings may be fused to each other;

 R^3 is naphthyl or phenyl, each optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl, C_1 - C_6 trihaloalkoxy, C_1 - C_6 alkylsulfonyl, -N(R^{12})₂, -OC(O) R^{12} , -C(O)O R^{12} , -S(O)₂N(R^{12})₂, cycloalkyl, heterocyclyl, heteroaryl and heteroarylcycloalkyl, provided that R^3 is not phenyl substituted with optionally substituted thienyl, and provided that when R^3 is naphthyl, R^2 can not be C_1 - C_6 alkyl, C_2 - C_6 hydroxyalkyl or phenyl substituted by amino;

 R^4 , R^5 and R^6 are each independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R^{13})₂;

 R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or R^7 and R^{7a} together, or R^8 and R^{8a} together, or R^9 and R^{9a} together, or R^{10} and R^{10a} together are an oxo group, provided that when V_a is -C(O)-, R^7 and R^{7a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^7 , R^{7a} , R^8 , R^{8a} , R^9 , R^{9a} , R^{10} , and R^{10a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^{10} , R^{10a} , R^7 , and R^{7a} together with one of R^8 , R^{8a} , R^9 and R^{9a}

form an alkylene bridge, while the remaining R^{10} , R^{10a} , R^7 , R^{7a} , R^8 , R^8 , R^9 , and R^{9a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

each R^{12} is independently selected from hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, aryl or aralkyl; and

each R¹³ is independently selected from hydrogen or C₁-C₆alkyl; a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

58. The compound of Claim 57 wherein:

x and y are each 1;

R¹ is hydrogen or C₁-C₆alkyl;

 $$\rm R^2$$ is selected from the group consisting of $\rm C_1$ -C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₃-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂ heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

 R^3 is naphthyl or phenyl, each optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl, C_1 - C_6 trihaloalkoxy, C_1 - C_6 alkylsulfonyl, -N(R^{12})₂, -OC(O) R^{12} , -C(O)OR¹² or -S(O)₂N(R^{12})₂;

R⁴, R⁵ and R⁶ are each hydrogen;

R⁷, R^{7a}, R⁸, R^{8a}, R⁹, R^{9a}, R¹⁰, and R^{10a} are each hydrogen; and each R¹² is independently selected from hydrogen, C₁-C₆alkyl, C₃-C₆cycloalkyl, aryl or aralkyl.

59. The compound of Claim 58 wherein:

 R^2 is C_7 - C_{12} aralkyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_3 alkyl and C_1 - C_6 trihaloalkyl; and R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 trihaloalkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

- 60. The compound of Claim 59 selected from the group consisting of the following:
- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid (3-phenyl-propyl)-amide;
- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid phenethyl-amide:

5-[4-(2-Trifluoromethylbenzoyl)piperazin-1-yl]pyridine-2-carboxylic acid [2-(4-fluorophenyl)ethyl]amide;

- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid [3-(4-fluorophenyl)-propyl]-amide;
- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid 4-trifluoromethyl-benzylamide;
- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid [3-(4-trifluoromethyl-phenyl)-propyl]-amide; and
- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid [2-(4-trifluoromethyl-phenyl)-ethyl]-amide.
 - 61. The compound of Claim 58 wherein:

R² is C₁-C₁₂alkyl or C₂-C₁₂alkenyl; and

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

- 62. The compound of Claim 61 selected from the group consisting of the following:
- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid (3-methyl-butyl)-amide;
- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid hexylamide;
- 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid pentylamide;
- 5-[4-(4-Fluoro-2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid (3-methyl-butyl)-amide; and
- 5-[4-(5-Fluoro-2-trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid (3-methyl-butyl)-amide.
 - 63. The compound of Claim 58 wherein:

R² is C₃-C₁₂cycloalkyl or C₄-C₁₂cycloalkylalkyl; and

R³ is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C₁-C₆alkyl, C₁-C₆trihaloalkyl and C₁-C₆trihaloalkoxy.

- 64. The compound of Claim 63 selected from the group consisting of the following:
- 5-[4-(2-Trifluoromethylbenzoyl)piperazin-1-yl]pyridine-2-carboxylic acid (3-cyclohexyl-propyl)amide;

5-[4-(6-Trifluoromethyl-cyclohexa-1,3-dienecarbonyl)-piperazin-1-yl]-pyridine-2-carboxylic acid (2-cyclohexyl-ethyl)-amide; and 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyridine-2-carboxylic acid cyclohexylmethyl-amide.

65. The compound of Claim 58 wherein:

 R^2 is C_3 - C_{12} heterocyclylalkyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl, C_1 - C_6 trihaloalkoxy, C_1 - C_6 alkylsulfonyl, -N(R^{12})₂, -OC(O) R^{12} , -C(O)O R^{12} and -S(O)₂N(R^{12})₂;

 R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy; and

each R^{12} is independently selected from hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, aryl or aralkyl.

- 66. The compound of Claim 65 wherein R² is 2-piperazinylethyl optionally substituted by -C(O)OR¹².
- 67. The compound of Claim 66, namely, 4-[2-({5-[4-(2-Trifluoromethylbenzoyl)-piperazin-1-yl]-pyridine-2-carbonyl}-amino)-ethyl]-piperazine-1-carboxylic acid tert-butyl ester.
 - 68. The compound of Claim 58 wherein:

 R^2 is C_7 - C_{12} aralkyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_3 alkyl and C_1 - C_6 trihaloalkyl; and R^3 is naphthyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

- 69. The compound of Claim 68 selected from the group consisting of the following:
- 5-[4-(Naphthalene-1-carbonyl)-piperazin-1-yl]-pyridine-2-carboxylic acid (3-phenyl-propyl)-amide; and
- 5-[4-(Naphthalene-1-carbonyl)piperazin-1-yl]pyridine-2-carboxylic acid phenethylamide.

70. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 57.

71. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 57.